

REMARKS

The enclosed is responsive to the Examiner's Office Action mailed on July 22, 2008. By way of the present response, Applicant has: 1) amended no claims; and 2) added no claims; and 3) canceled no claims. As such, claims 34-67 remain pending. Reconsideration of this application is respectfully requested.

Claim Rejections – 35 U.S.C. § 103

Claims 34-67 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,510,479 by Hao, (hereinafter "Hao") in view of U.S. Patent No. 6,697,862 by Beser et al., (hereinafter, "Beser").

Hao describes a method for determining priority among messages transmitted over a CAN bus. In particular, Hao describes that a CAN bus arbitration priority scheme as established by the CAN protocol is used in combination with an association with the highest or lowest-numbered message object.

Beser describes a method for using host configuration messages to maintain a network address table in a data-over-cable system. In particular, Beser describes protocols used in a cable modem and generally discusses the Open System Interconnection ("OSI") model's use in computer networks.

Applicant respectfully submits that Hao does not teach or suggest a combination with Beser and that Beser does not teach or suggest a combination with Hao. The Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some **articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.**" (MPEP 2142 quoting *In re Kahn*, 441 F.3d 977, 988,

78 USPQ2d 1329, 1336 (Fed. Cir. 2006). See also *KSR*, 127 S. Ct. at 1741, 82 USPQ2d at 1396) (emphasis added). The Office Action alleges that “it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ Beser’s invention, to improve the maintenance of the network address tables so that stale entries are quickly identified and removed from the table.” (Office Action dated 7/22/08, page 2). Applicant respectfully disagrees.

Hao does not describe or utilize network address tables. Network address tables “may be thought of as pairs of network addresses and forwarding addresses. Such tables are typically maintained and managed according to a protocol such as the Address Resolution Protocol.” (Beser, col. 2, lines 21-25). The types of network addresses described by Beser include IP addresses and Medium Access Control (MAC) addresses. It would not be useful in Hao, as it is described, to insert a network address table. It would fundamentally change the operation of Hao to utilize network address tables instead of the CAN protocol arbitration scheme. Accordingly, Applicant submits that the Office Action has not provided a rational underpinning for combining Hao and Beser.

Even if Hao and Beser were combined, the references, alone or in combination, fail to disclose:

A method comprising:
communicating information between Internet protocol (IP) hosts over a controller area network (CAN) bus within a vehicle by encapsulating an IP message in a CAN protocol message.

(Claim 34) (emphasis added).

Hao describes the use of a CAN bus within a vehicle, but does not disclose communicating information between IP hosts of over a CAN bus. IP is not

mentioned in Hao and Hao does not hint or suggest that IP hosts communicate over a CAN bus. Beser also does not disclose communicating information between IP hosts of over a CAN bus. Although Beser does discuss the use of IP, Beser does not discuss it in the context of a CAN bus, much less a CAN bus within a vehicle. Applicant respectfully submits that neither Hao nor Beser, alone or in combination, disclose communicating information between IP hosts of over a CAN bus.

Applicant agrees with the Office Action's statement that Hao does not disclose encapsulating an IP message in a CAN protocol message. Applicant disagrees with the Office Action's assertion that Beser does. The Office Action relies upon Beser's statement that the cable modem termination system (CMTS) strips off the encapsulating IP header. However, this does not teach or suggest encapsulating an IP message in a CAN protocol message. Beser describes the use of a PPP layer, not encapsulating an IP message in a CAN protocol message: "As is known in the art, the PPP is used to encapsulate network layer datagrams over a serial communications link." (Beser, col. 7, lines 3-4).

Accordingly, Applicant respectfully submits that the rejection of claim 34 in view of Hao and Beser has been overcome. Given that claims 35-47 and 66-67 are dependent upon claim 34, and include additional features, Applicant respectfully submits that the rejection of claims 35-47 and 66-67 has been overcome for at least the same reasons as above.

Claim 48 recites:

An apparatus comprising:

a first Internet protocol (IP) host located within a vehicle, coupled to a controller area network (CAN) bus, and **configured to communicate with a second IP host by encapsulating an IP message in a CAN protocol message** to create a CAN/IP message,

wherein the CAN/IP message includes an IP destination address.

(Claim 48) (emphasis added).

As noted above, neither Hao nor Beser teach or suggest encapsulating an IP message in a CAN protocol message. Therefore, Applicant respectfully submits that the rejection of claim 48 in view of Hao and Beser has been overcome. Given that claims 49-60 and 64-65 are dependent upon claim 48, and include additional features, Applicant respectfully submits that the rejection of claims 49-60 and 64-65 has been overcome for at least the same reasons as above.

Claim 61 recites:

A system comprising:

means for **communicating information between Internet protocol (IP) hosts within a vehicle equipped with a controller area network (CAN) bus** and vehicle modules within the vehicle **by encapsulating an IP message in a CAN protocol message** to create a CAN/IP message, wherein the CAN/IP message includes an IP destination address.

(Claim 61) (emphasis added).

As noted above, neither Hao nor Beser teach or suggest encapsulating an IP message in a CAN protocol message. Accordingly, Applicant respectfully submits that the rejection of claim 61 in view of Hao and Beser has been overcome for at least the same reasons as above.

Claim 62 recites:

A method comprising:

encapsulating an Internet protocol (IP) message in a controller area network (CAN) protocol message, to create a CAN/IP message including an IP destination address of an IP host on a CAN bus within a vehicle;

**determining a CAN bus address corresponding to the IP destination address; and
transmitting the IP message to the IP host by
transmitting the CAN/IP message on the CAN bus to
the CAN bus address.**

(Claim 62) (emphasis added).

As noted above, neither Hao nor Beser teach or suggest encapsulating an Internet protocol (IP) message in an controller area network (CAN) protocol message. Accordingly, Applicant respectfully submits that the rejection of claim 62 in view of Hao and Beser has been overcome for at least the same reasons as above. Given that claim 63 is dependent upon claim 62, and include additional features, Applicant respectfully submits that the rejection of claims 63 has been overcome for at least the same reasons as above.

CONCLUSION

In view of the foregoing remarks, Applicant respectfully submits that the pending claims are in condition for allowance. Applicant respectfully requests reconsideration of the application and allowance of the pending claims.

If the Examiner determines the prompt allowance of these claims could be facilitated by a telephone conference, the Examiner is invited to contact Ryan Elliott at (408) 720-8300.

Deposit Account Authorization

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due. Furthermore, if an extension is required, then Applicant hereby requests such extension.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

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/Ryan W. Elliott/
Ryan W. Elliott
Reg. No. 60,156

1279 Oakmead Parkway
Sunnyvale, CA 94085-4040
(408) 720-8300
Customer No.: 08791